Table S5. Amyloid-β(1-40) (Aβ), aGSK3β and p-tau/total tau (pTau/tTau) detailed by patient, iPSC line and culture well

Patient	iPSC line	NPC line	Diff. plate*	FACS purifica- tion date	Aβ/lysate (pg/mg)†	Aβ purif. mean ‡	Aβ iPSC line mean §	Aβ patient mean¶	aGSK3β (% of total) †	aGSK3β purif. mean‡	aGSK3β iPSC line mean§	Active GSK3β patient mean¶	pTau/ tTau (units/ ng)†	pTau/ tTau purif. mean‡	pTau/ tTau iPSC line mean§	pTau/ tTau patient mean¶
NDC1	NDC1.1	NDC1.1.1	1.1	5/20/09	216.5	191.3	87.8	89.1			8.2	14.1			5.0	4.5
			2.1	1	166.1											
			3.1	3/19/10	0.0	2.2			10.8	8.2			3.7	5.0	1	
			4.1		6.4				7.8				3.7			
			5.1		2.2				6.1				6.0		-	
			6.1		0.0								6.6			
			7.1	9/30/10	147.4	132.9										
			8.1		154.8											
			9.1		96.6											
	NDC1.2	NDC1.2.1	1.1	10/8/09	34.6	68.1	71.3				14.9				4.5	
			2.1		0.0											
			3.1		95.0										_	
			3.2	0/22/10	143.0				46.6	44.0						
			4.1	9/23/10	83.3	71.9			16.6	14.9			4.1	4.5		
			5.1	2/26/11	85.5	_			15.5				4.8			
			6.1		59.0 59.8				12.6				4.7			
			7.1		81.5	81.5							4.5			
	NDC1.3	NDC1.3.1	1.1	10/6/09	140.4	135.2	108.2				19.1		4.3		4.1	
	NDC1.5	NDC1.5.1	2.1	10/0/09	130.0	133.2	100.2				19.1			_	4.1	
			3.1	10/7/10	96.8	99.5			17.0	19.1			4.3	4.1	-	
			4.1	10///10	70.8	- 77.5			18.9	17.1			4.1	- 1.1		
			5.1	_	118.7	1			21.5				4.1	_		
			5.2	-	111.6	1										
			6.1	2/23/11	90.1	101.9							3.8		1	
			7.1	1	95.4	1				-				1		
			8.1	-	120.1	-								_		

<sup>\*</sup> Differentiation plate. First digit identifies the plate of NPCs differentiated for 3 weeks, prior to FACS purification. The second digit identifies the well of purified neurons that was cultured for an additional 5 days before harvesting † Observed amount for each corresponding well of purified neurons ‡ Mean amount for each FACS purification batch § Mean amount for each iPSC line (displayed in Supplementary Fig. 11) ¶ Mean amount for each patient (displayed in Fig. 2 and Supplementary Table 4)

b																
Patient	iPSC line	NPC line	Diff. plate*	FACS purifica- tion date	Aβ/lysate (pg/mg)†	Aβ purif. mean ‡	Aβ iPSC line mean §	Aβ patient mean¶	aGSK3β (% of total) †	aGSK3β purif. mean‡	aGSK3β iPSC line mean§	Active GSK3β patient mean¶	pTau/ tTau (units/ ng)†	pTau/ tTau purif. mean‡	pTau/ tTau iPSC line mean§	pTau/ tTau patient mean¶
NDC2	NDC2.1	NDC2.1.1	1.1	12/4/09	48.8	82.5	72.2	90.1	13.7	12.0	12.0	16.4	3.1	3.2	3.3	2.9
			2.1		155.0				8.9				3.3			
			3.1		43.8				13.5				3.2			
			4.1	4/3/10	58.6	58.6							3.5	3.5		
		NDC2.1.2	5.1	2/25/11	54.9	66.5					1				1	
			6.1		71.5											
			7.1		73.1											
	NDC2.2	NDC2.2.1	1.1	12/1/09	41.0	28.8	74.4			14.3	12.0				3.0	
			2.1		0.0											
			3.1		29.7											
			3.2		44.3				14.3							
			4.1	9/2/10	139.4	135.4			9.9	10.9			3.1	3.0		
			5.1		144.4				11.9				3.2			
			6.1		122.4								3.2			
			6.2										2.7			
	NDC2.3	NDC2.3.1	1.1	9/6/10	206.7	193.5	123.7		15.5	25.1	25.1		2.3	2.3	2.3	
			1.2		215.2				19.5				2.4			
			2.1		187.7				40.4				2.4			
			3.1	10/1/16	164.2	20.5							2.2			
			4.1	12/4/10	19.9	30.6										
			5.1		0.0											

<sup>\*</sup> Differentiation plate. First digit identifies the plate of NPCs differentiated for 3 weeks, prior to FACS purification. The second digit identifies the well of purified neurons that was cultured for an additional 5 days before harvesting † Observed amount for each corresponding well of purified neurons ‡ Mean amount for each FACS purification batch § Mean amount for each iPSC line (displayed in Supplementary Fig. 11) ¶ Mean amount for each patient (displayed in Fig. 2 and Supplementary Table 4)

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Patient	iPSC line	NPC line	Diff. plate*	FACS purifica- tion date	Aβ/lysate (pg/mg)†	Aβ purif. mean ‡	Aβ iPSC line mean §	Aβ patient mean¶	aGSK3β (% of total) †	aGSK3β purif. mean‡	aGSK3β iPSC line mean§	Active GSK3β patient mean¶	pTau/ tTau (units/ ng)†	pTau/ tTau purif. mean‡	pTau/ tTau iPSC line mean§	pTau/ tTau patient mean¶
sAD1	sAD1.1	sAD1.1.1	1.1	12/15/09	102.3	110.2	99.9	94.5	24.4	27.4	27.4	23.9	3.9	3.9	3.9	4.9
			2.1		98.4				26.9				3.7			
			3.1		129.9				30.8				4.2			
			3.2								-		4.0			
		sAD1.1.2	4.1	9/8/10	94.8	92.2									ı	
			4.2		90.2											
			5.1		79.2											
	1714	17111	6.1		104.7	20.5	<b>-2</b> 0									
	sAD1.2	sAD1.2.1	1.1	3/19/10	30.4	39.7	73.8			=	19.8		2.6	3.1	4.9	
			3.1		46.5						_		2.6			
			4.1	9/7/10	111.8	99.3			20.1	19.8			7.0	6.7		
			4.1		76.3	99.3			19.5	19.8			6.5	0.7		
			5.1		82.6				19.7	-			0.3			
			6.1		126.6				15.7							
	sAD1.3	sAD1.3.1	1.1	4/3/10	131.7	124.8	109.9		31.5	24.7	24.7		5.6	5.8	5.8	
			2.1	<u> </u>	108.1				29.2	- 21.7			7.2			
			3.1		134.8				13.4	1			5.0			
			3.2	_									5.6			
			4.1	10/7/10	87.5	98.7									-	
			5.1	_	80.3					-						
			6.1		124.5									1		
			6.2		102.7					1						

<sup>\*</sup> Differentiation plate. First digit identifies the plate of NPCs differentiated for 3 weeks, prior to FACS purification. The second digit identifies the well of purified neurons that was cultured for an additional 5 days before harvesting † Observed amount for each corresponding well of purified neurons ‡ Mean amount for each FACS purification batch § Mean amount for each iPSC line (displayed in Supplementary Fig. 11) ¶ Mean amount for each patient (displayed in Fig. 2 and Supplementary Table 4)

Patient	iPSC line	NPC line	Diff. plate*	FACS purifica- tion date	Aβ/lysate (pg/mg)†	Aβ purif. mean ‡	Aβ iPSC line mean §	Aβ patient mean¶	aGSK3β (% of total) †	aGSK3β purif. mean‡	aGSK3β iPSC line mean§	Active GSK3β patient mean¶	pTau/ tTau (units/ ng)†	pTau/ tTau purif. mean‡	pTau/ tTau iPSC line mean§	pTau/ tTau patient mean¶
sAD2	sAD2.1	sAD2.1.1	1.1	4/3/10	229.9	172.5	206.4	299.9	33.2	35.4	35.4	36.4	8.0	7.3	7.3	7.8
			2.1		135.8				36.9				7.0			
			3.1		158.3				36.0				7.4			
			3.2		165.9								7.0			
			4.1	10/7/10	257.7	240.2										
			5.1		247.8											
			6.1		200.2											
			6.2		255.2											
	sAD2.2	sAD2.2.1	1.1	12/4/09	237.6	240.7	339.8		28.3	24.3	24.3			5.6	5.0	
			2.1		227.9				19.8				4.7			
			3.1		256.4	204.4			24.8				6.5			
			4.1	2/28/10	208.3	204.4							4.7	4.4		
			5.1		185.4								4.1			
			6.1		219.4											
			7.1	9/1/10	704.4	691.4										
	177.0	15001	8.1		678.5		252.5			40.5	40.5		12.2			
	sAD2.3	sAD2.3.1	1.1	2/25/11	207.4	233.1	353.5		50.8	49.5	49.5		12.3	11.1	11.1	
			2.1		216.0				47.6				8.7			
			3.1		275.8				50.0				11.5			
			3.2		401.6	425.7					_		12.0			
			3.3 4.1		401.6	423.7								_		
			5.1		434.3									_		
			6.1		417.2									_		
			6.2	_	445.4											
	sAD2.4	sAD2.4.1	1.1	3/22/11	395.9	375.3	375.3		42.1	40.7	40.7		8.1	6.9	6.9	
	37102.1	3/11/2.1.1	2.1	- 3,22,111	450.2	- 373.3	373.3		40.3	10.7	10.7		6.3	- 0.5	0.9	
			3.1		414.9				39.7				8.1	_		
			4.1		240.1				37.7				5.0	_		
	sAD2.5	sAD2.5.1	1.1	3/22/11	433.3	381.0	381.0		42.9	42.7	42.7		7.7	7.3	7.3	
	2	2.2.2	2.1		431.4	-			41.8				7.4	-		
			3.1	-	423.2				43.4				6.9			
			4.1	_	236.1	4							7.2	4		

<sup>\*</sup> Differentiation plate. First digit identifies the plate of NPCs differentiated for 3 weeks, prior to FACS purification. The second digit identifies the well of purified neurons that was cultured for an additional 5 days before harvestin † Observed amount for each corresponding well of purified neurons

‡ Mean amount for each FACS purification batch

§ Mean amount for each iPSC line (displayed in Supplementary Fig. 11)

¶ Mean amount for each patient (displayed in Fig. 2 and Supplementary Table 4)

Patient	iPSC line	NPC line	Diff.	FACS	Aβ/lysate	Αβ	Αβ	Αβ	aGSK3β (%	aGSK3β	aGSK3β	Active	pTau/	pTau/	pTau/	pTau/
			plate*	purifica- tion date	(pg/mg)†	purif. mean	iPSC line	patient mean¶	of total) †	purif. mean‡	iPSC line	GSK3β patient	tTau (units/	tTau purif.	tTau iPSC	tTau patient
				tion date		‡	mean	mean <sub>  </sub>		mean <sub>4</sub>	mean§	mean¶	ng)†	mean‡	mean§	mean¶
							§									
APP <sup>Dp</sup> 1	APP <sup>Dp</sup> 1.1	APP <sup>Dp</sup> 1.1.1	1.1	5/4/09	245.0	262.8	247.6	275.9			26.5	28.6	6.0	5.9	7.4	8.4
			2.1		280.7								5.7			
			3.1	10/14/09	187.1	209.2			24.1	26.5				8.8		
			4.1		205.3				29.5				9.4			
			5.1		235.2				25.9				8.3	1		
			6.1	10/5/10	172.9	289.9										
			7.1		406.8									1		
	APP <sup>Dp</sup> 1.2	APP <sup>Dp</sup> 1.2.1	1.1	3/8/10	720.4	737.1	393.0				30.2			9.4	14.1	
			2.1		753.8								9.4			
			3.1	9/2/10	151.6	165.7			34.7	30.2			16.1	15.6		
			4.1		149.2				27.5				16.0			
			5.1		196.4				28.5				14.8			
			6.1	4/11/11	393.1	389.7										
			7.1		386.4											
	APP <sup>Dp</sup> 1.3	APP <sup>Dp</sup> 1.3.1	1.1	2/16/10	202.8	207.7	187.2				29.1		3.2	3.7	3.7	
			2.1		212.7								4.2			
			3.1	3/8/10	46.3	78.4			27.6	29.1				3.7		
			4.1		78.0				33.0				4.0			
			5.1		111.0				26.8				3.4			
			6.1	4/11/11	251.9	329.9										
			7.1		408.0											

<sup>\*</sup> Differentiation plate. First digit identifies the plate of NPCs differentiated for 3 weeks, prior to FACS purification. The second digit identifies the well of purified neurons that was cultured for an additional 5 days before harvesting † Observed amount for each corresponding well of purified neurons ‡ Mean amount for each FACS purification batch § Mean amount for each iPSC line (displayed in Supplementary Fig. 11) ¶ Mean amount for each patient (displayed in Fig. 2 and Supplementary Table 4)

Patient	iPSC line	NPC line	Diff. plate*	FACS purifica- tion date	Aβ/lysate (pg/mg)†	Aβ purif. mean ‡	Aβ iPSC line mean §	Aβ patient mean¶	aGSK3β (% of total) †	aGSK3β purif. mean‡	aGSK3β iPSC line mean§	Active GSK3β patient mean¶	pTau/ tTau (units/ ng)†	pTau/ tTau purif. mean‡	pTau/ tTau iPSC line mean§	pTau/ tTau patient mean¶
APP <sup>Dp</sup> 2	APP <sup>Dp</sup> 2.1	APP <sup>Dp</sup> 2.1.1	1.1	3/3/10	35.9	24.2	252.5	356.8			41.7	41.3			6.6	7.7
			2.1	1	17.2											
			3.1	1	19.4											
			4.1	3/13/10	140.9	119.9								4.9		
			5.1		103.8								4.4			
			6.1		115.0								5.3			
			7.1	9/4/10		613.3			37.7	41.7				8.4		
			8.1		582.8				38.8				8.3			
			9.1		682.4				48.7				8.5			
	APP <sup>Dp</sup> 2.2	APP <sup>Dp</sup> 2.2.1	1.1	3/1/10	537.7	277.9	507.1				49.4				8.8	
			2.1		18.1											
			3.1	3/28/10	81.2	70.7										
			4.1		60.0											
			5.1		70.9											
			6.1	9/1/10	1016.9	949.0			53.0	49.4			9.6	8.8		
			7.1		956.2				49.3				8.2			
			8.1		978.3				45.7	=			7.4			
	+ ppDna a	+ ppDno a 1	8.2	2/21/10	844.5	122.0	210.0					-	9.9		7.6	
	APP <sup>Dp</sup> 2.3	APP <sup>Dp</sup> 2.3.1	1.1	2/21/10	169.3	132.8	310.8				32.7				7.6	
			2.1	3/24/10	96.2	88.3										
			3.1	3/24/10	82.0 81.2	88.3								1		
			5.1	_	101.6	_								1		
			6.1	9/28/10	570.8	566.6			33.3	32.7			7.2	7.6	_	
			7.1	9/28/10	570.8	300.6			32.5	32.1			8.5	/.0		
			8.1	4	571.6	_			32.3	_			6.9	1		
				4		4			32.3					4		
			8.2		565.0								7.9			

<sup>\*</sup> Differentiation plate. First digit identifies the plate of NPCs differentiated for 3 weeks, prior to FACS purification. The second digit identifies the well of purified neurons that was cultured for an additional 5 days before harvesting † Observed amount for each corresponding well of purified neurons ‡ Mean amount for each FACS purification batch § Mean amount for each iPSC line (displayed in Supplementary Fig. 11)

¶ Mean amount for each patient (displayed in Fig. 2 and Supplementary Table 4)